

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
22 September 2005 (22.09.2005)

PCT

(10) International Publication Number
WO 2005/088119 A1

(51) International Patent Classification⁷: **F03B 3/12**,
7/00, 13/10, 13/26

(21) International Application Number:
PCT/SE2005/000346

(22) International Filing Date: 10 March 2005 (10.03.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
0400667-2 16 March 2004 (16.03.2004) SE

(71) Applicant (for all designated States except US): **UPP-
SALA POWER MANAGEMENT CONSULTANTS
AB** [SE/SE]; c/o Näringslivskonsult, Science Park, S-751
83 Uppsala (SE).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **LEIJON, Mats**

[SE/SE]; Hävelvägen 6, S-756 47 Uppsala (SE). **BERN-
HOFF, Hans** [SE/SE]; Geijersgatan 56A, S-752 31
Uppsala (SE). **SEGERGREN, Erik** [SE/SE]; Höganäs-
gatan 8C, S-753 30 Uppsala (SE).

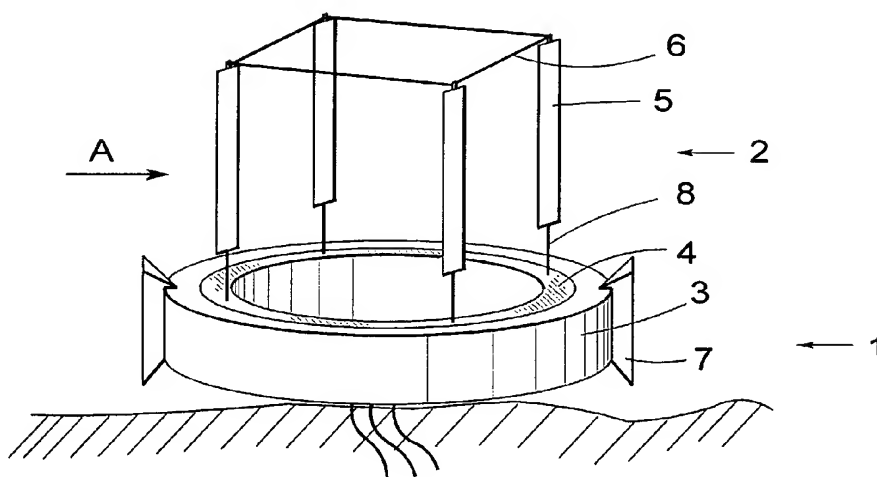
(74) Agents: **KARLSSON, Leif** et al.; Groth & Co. KB, Box
6107, S-102 32 Stockholm (SE).

(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ,
TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA,
ZM, ZW.

(84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,

[Continued on next page]

(54) Title: ASSEMBLY COMPRISING A WATER TURBINE AND A GENERATOR, THE ROTOR OF WHICH IS DIRECT-
CONNECTED TO EACH ONE OF THE BLADES OF THE TURBINE



(57) Abstract: The invention relates to an assembly having a water turbine (2) and a rotary electrical generator (1), the rotor (4) of which is connected to the turbine (2). The turbine (2) has at least three axially directed blades (5). According to the invention, each blade (5) is individually directly connected to the rotor (4) of the generator (1). The invention also relates to a use of the invented assembly for the generation of current from underwater currents.

WO 2005/088119 A1



FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declarations under Rule 4.17:

- *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations* AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, ARIPO patent (BW, GH, GM, KE, LS, MW, MZ,

NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)

- *of inventorship (Rule 4.17(iv)) for US only*

Published:

- *with international search report*

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.